

Safety Data Sheet dated 20/9/2017, version 3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier
Mixture identification:
Trade name: DILUART5000
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Thinner for inks
Uses advised against:
all uses not listed in the recommended
- 1.3. Details of the supplier of the safety data sheet
Company:
ITW CER
85 RUE CASTELLION
01117 OYONNAX – France
+33 (0)4 74 73 26 00
- 1.4. Emergency telephone number
+33 (0)1 45 42 59 59
Company/Organization : INRS / ORFILA <http://www.centres-antipoison.net>

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)
- ⚠ Warning, Flam. Liq. 3, Flammable liquid and vapour.
 - ⚠ Warning, Acute Tox. 4, Harmful if swallowed.
 - ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
 - ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
- Adverse physicochemical, human health and environmental effects:
No other hazards
- 2.2. Label elements
Hazard pictograms:



- Warning
- Hazard statements:
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- Precautionary statements:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire, use a CO2 fire extinguisher to extinguish.

Material Safety Data Sheet DILUART5000

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

2-butoxyethanol; ethylene glycol monobutyl ether

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
50% - 60%	2-methoxy-1-methylethyl acetate	Index number: CAS: EC: REACH No.: 607-195-00-7 108-65-6 203-603-9 01-2119475791-29	⚠ 2.6/3 Flam. Liq. 3 H226
50% - 60%	2-butoxyethanol; ethylene glycol monobutyl ether	Index number: CAS: EC: REACH No.: 603-014-00-0 111-76-2 203-905-0 01-2119475108-36	⚠ 3.3/2 Eye Irrit. 2 H319 ⚠ 3.2/2 Skin Irrit. 2 H315 ⚠ 3.1/4/Oral Acute Tox. 4 H302 ⚠ 3.1/4/Dermal Acute Tox. 4 H312 ⚠ 3.1/4/Inhal Acute Tox. 4 H332

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with skin:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

Contact with eyes:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

Swallowing:

Do NOT induce vomiting.

Give nothing to eat or drink.

Material Safety Data Sheet DILUART5000

Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended extinguishers:

In case of fire, use a CO2 fire extinguisher to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Material Safety Data Sheet DILUART5000

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

ACGIH - TWA: 257 mg/m³, 50 ppm

EU - TWA(8h): 275 mg/m³, 50 ppm - STEL: 550 mg/m³, 100 ppm - Notes: Indicative

Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

2-butoxyethanol; ethylene glycol monobutyl ether - CAS: 111-76-2

EU - TWA(8h): 98 mg/m³, 20 ppm - STEL: 246 mg/m³, 50 ppm - Notes: Bold-type:

Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)

ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - Eye and URT irr

DNEL Exposure Limit Values

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Worker Industry: 153.5 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 275 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

Target: Fresh Water - Value: 0.635 mg/l

Target: Marine water - Value: 0.0635 mg/l

Target: Freshwater sediments - Value: 3.29 mg/kg

Target: Marine water sediments - Value: 0.329 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Material Safety Data Sheet DILUART5000

Properties	Value	Method:	Notes:
Appearance and colour:	liquido	--	--
Odour:	N.A.	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	> 23 - 55 ° C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	0.934	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--

Material Safety Data Sheet DILUART5000

Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:
N.A.
If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A. :
 - a) acute toxicity;
 - b) skin corrosion/irritation;
 - c) serious eye damage/irritation;
 - d) respiratory or skin sensitisation;
 - e) germ cell mutagenicity;
 - f) carcinogenicity;
 - g) reproductive toxicity;
 - h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
N.A.
- 12.2. Persistence and degradability
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

Material Safety Data Sheet DILUART5000

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 1210
IATA-UN Number: 1210
IMDG-UN Number: 1210

14.2. UN proper shipping name

ADR-Shipping Name: PRINTING INK RELATED MATERIAL(including printing ink or reducing compound), flammable
IATA-Shipping Name: PRINTING INK RELATED MATERIAL(including printing ink or reducing compound), flammable
IMDG-Shipping Name: PRINTING INK RELATED MATERIAL(including printing ink or reducing compound), flammable

14.3. Transport hazard class(es)

ADR-Class: 3
ADR - Hazard identification number: 30
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III

14.5. Environmental hazards

ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary risks: -
ADR-S.P.: 163 640E
ADR-Transport category (Tunnel restriction code): (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary risks: -
IATA-Cargo Aircraft: 366
IATA-S.P.: A3 A72
IATA-ERG: 3L
IMDG-EmS: F-E , S-D
IMDG-Subsidiary risks: -
IMDG-Stowage and handling: Category A
IMDG-Segregation: -

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Material Safety Data Sheet DILUART5000

Dir. 2000/39/EC (Occupational exposure limit values)
 Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Pronto all'Uso

Volatile Organic compounds - VOCs = 100.00 %

Volatile Organic compounds - VOCs = 1000.00 g/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 57.76

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2

Material Safety Data Sheet DILUART5000

Eye Irrit. 2	3.3/2	Eye irritation, Category 2
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Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
 SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods

Material Safety Data Sheet DILUART5000

	by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.